

DTIC FILE COPY

WESTERN THREAT PERCEPTION AND THE
MILITARY DOCTRINE OF THE
WARSAW TREATY ORGANIZATION

AD-A231 791

DTIC
ELECTE
FEB 14 1991
S B D

SOVIET
ARMY
STUDIES
OFFICE

Fort Leavenworth,
Kansas

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited



91 2 13 018

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

| | | | | |
|---|--|---|--|--|
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE APR 1990 | 3. REPORT TYPE AND DATES COVERED FINAL | |
| 4. TITLE AND SUBTITLE WESTERN THREAT PERCEPTION AND THE MILITARY DOCTRINE OF THE WARSAW TREATY ORGANIZATION | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) JACOB W. KIPP | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) DEPARTMENT OF THE ARMY SOVIET ARMY STUDIES OFFICE ATTN: ATZL-SAS FORT LEAVENWORTH, KANSAS 66027-5015 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) | | | 10. SPONSORING / MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES | | | | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT STATEMENT A APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (Maximum 200 words) | | | | |
| 14. SUBJECT TERMS S. AKHROMEYEV, D. YAZOV, V. LARIONOV, A. KOKOSHIN, RECONNAISSANCE-STRIKE COMPLEX, ARMS CONTROL | | | 15. NUMBER OF PAGES 39 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED | 18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED | 19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED | 20. LIMITATION OF ABSTRACT | |

WESTERN THREAT PERCEPTION AND THE MILITARY DOCTRINE
OF THE WARSAW TREATY ORGANIZATION

Dr. Jacob W. Kipp
Soviet Army Studies Office
U.S. Army Combined Arms Center
Fort Leavenworth, Kansas

April 1990

The views expressed here are those of the
Soviet Army Studies Office. They should not
necessarily be construed as validated threat doctrine.

WESTERN THREAT PERCEPTION AND THE MILITARY DOCTRINE OF THE WARSAW TREATY ORGANIZATION

INTRODUCTION

On May 29, 1987, the Political Consultative Committee of the Warsaw Pact issued an official communique, proclaiming that its "military doctrine [voyennaya doktrina]... is strictly defensive and proceeds from the fact that the application of military means to resolve any dispute is inadmissible under current conditions."¹ Since that declaration military doctrine has become a topic of public discussion and debate in the East and West. Soviet civilian and military commentators, as well as representatives from the others member states of the Warsaw Pact, have further elaborated on this new definition. In July 1987 the Soviet Minister of Defense, General of the Army D. T. Yazov, defined Soviet military doctrine in the following terms:

Our military doctrine today consists of a system of basic views on the prevention of war, on military organizational development, the preparation of the country and its armed forces for repelling aggression, and methods of conducting warfare in defense of socialism [Yazov's emphases].²

Yazov's chief point, and one that had been expressly acknowledged in early 1986 at the XXVII Party Congress of the Communist Party of the Soviet Union by General Secretary M. S. Gorbachev, was the openly proclaimed subordination of military doctrine to the requirement "of preventing war, both nuclear and conventional."³

This redefinition of military doctrine with its proclaimed goal of preventing war has engendered a serious debate in the East and West over the role of military doctrine in international security arrangements and the relationship of military doctrine to threat perceptions. Yet, as Peer Lange has pointed out, military doctrine does not mean the same thing when used by the Warsaw Pact and when discussed by NATO officials or Western security analysts.⁴ In the former case military doctrine has a rich historical background, implied scientific rigor, and an explicit ideological content. In the recent past Soviet commentators had defined military doctrine as "a system of views accepted in a state on the objectives and character of possible war, on the preparation for it of the country's armed forces, and also on the means of conducting it."⁵ What made the 1987 version different from past definitions was the explicit emphasis on defensiveness and war prevention. Responses in the West ranged from dismissal of the entire redefinition process as propaganda to favorable anticipation as Western observers waited for proclamation to be turned into action. At the same time there was also a great deal of confusion over the significance of doctrinal change. Western analysts were quick to equate military doctrine with Western/NATO concepts of "defense policy and posture." Some sought to separate what was propaganda from what

was "operational doctrine." Others equated the WTO/Soviet concept of military doctrine with the much narrower Western usage applied strictly to basic warfighting concepts. Thus, the term military doctrine, according to the U. S. Joint Chiefs of Staff, refers to "fundamental principles by which the military forces guide their actions in support of objectives."⁶ Thus, Western perceptions about the form and content of Soviet military doctrine and the implications of recent changes in it have been in some measure shaped by the asymmetries of definition. This confusion, in turn, underscores the need for sustained efforts to make the national security/military cultures of each side more accessible to the other.

In response to Soviet/WTO calls for discussions on military doctrine Peer Lange in a thoughtful essay has pointed out how different the meanings of this term is in East and West and rejected using Soviet categories as the basis for East-West discussions. Instead, he proposed that threat assessment should become a prominent and permanent part of the East-West dialogues over military doctrine. After noting the value of computer-based evaluations of military options in this process, he stated:

But threat assessment is a promising approach, given that it allows discussion of the political logic (or ill-logic) of threat assumptions in addition to the military logic. Thus in threat assessment the desired connection between military and political issues can be kept alive.⁷

Given the audience for which this essay is intended, i. e., Soviet and WTO defense and security analysts, this essay will attempt to address the core of this problem by employing those categories which these authors and analysts have used to define Soviet/WTO military doctrine and to discuss changes within it, to appraise that doctrine as it has contributed to Western/NATO threat perception. This has been done so that we may avoid talking past each other on just such political and military connections in Western threat perception. The focus will be on Soviet/WTO categories and views as they have evolved historically.

As General of the Army G. I. Salmonov noted recently, "Military doctrine is a historical category. Its propositions can change and be added to under the impact of many factors, political, economic, military, and other."⁸ Such a statement implies gradual changes in content, which over time bring about changes in form as well. As a student of Russian and Soviet military history, the author finds such an approach appealing and hopes that it will provide a vehicle for examining the interconnections between Western threat perception and Soviet/WTO military doctrine. To understand how we might go about creating a new empathetic security system to replace that based upon mutual deterring threats we need some idea of the evolution of

the element of threats within Soviet/WTO military doctrine.⁹ As a practical matter of statecraft, accurate assessment of an opponent's capabilities and intentions has been and will remain difficult in the extreme. The reasons are complex and closely interconnected. They involve the opponent's secrecy, the usual ambiguity of available information, the inherent difficulties of assessing military power, the cognitive errors to which officials and governments are prone, the influence of bureaucratic politics upon the process of assessment, and ideological presuppositions about the opponent and his intentions. Miscalculations of threat are all too frequent in history.¹⁰

The dialectics of surprise and the unexpected has conditioned prudent statesmen and soldiers to err on the side of "worst case" analysis. The realities of the nuclear arsenals possessed by both superpowers have created a mutual perception of a shared security dilemma: no modern state can purchase greater security at the expense of other states. Inadvertent nuclear war has replaced calculated nuclear assault as the central problem confronting strategic defense planners on both sides. Yet, prudent, worst case analysis of the threat has persisted, even in the face of these trends. One of the major causes of the persistence of such "old thinking" has been the dilemma posed by the linkages between strategic nuclear, theater nuclear, and conventional forces.

If surprise has ceased to have military utility in the nuclear arena, it has retained its utility in conventional war. The experience of local wars since 1945 reenforces the centrality of surprise in determining the course and outcome of such conflicts and has influenced the assessment of the viability of conventional forces on defense in a given theater. The costs of the underestimation of an opponent's conventional capabilities and intentions in the postwar period have proven very high. Yet gambling on the advantages derived from surprise and deception in a central conflict between NATO and the WTO has always raised the risk of escalation to theater and strategic nuclear levels. Between two intolerable outcomes (a conventional military victory for the WTO or nuclear escalation) the West has sought to rely upon the latter to deter the former. However, the very problem of surprise, when coupled with the "friction" associated with the conduct of military operations, would in all probability frustrate and slow the response to a conventional attack as it accelerated the process of nuclear decision-making. The cardinal paradox of this conventional-nuclear inter-connection has been that the high degree of uncertainty needed to enhance deterrence credibility and stability in a crisis situation would create greater instability once hostilities had begun. NATO's preferred solutions, Flexible Response and Forward Defense, do not have much to recommend them, unless one considers the other options available in the past. They are much like Churchill's comment on democracy as the "worst-best form of



| |
|--|
| <input checked="checked" type="checkbox"/> |
| <input type="checkbox"/> |
| <input type="checkbox"/> |

Codes

and/or

Special

A-1

government." This has been case because of the dilemmas posed by the problem of surprise attack, which has confronted NATO throughout its existence.

General of the Army V. N. Lobov, the widely-acknowledged Soviet authority on the problem of "military stratagem" [voyennaya khitrost'] and surprise, has noted the dialectical connection of surprise with military art at all its levels, strategy, operational art, and tactics. Under modern conditions, as a host of local wars have demonstrated, the achievement of surprise in the initial period of war can affect the course and outcome of the conflict.¹¹

While Lobov has castigated Western defense planners for supposedly seeking to exploit surprise, he did not note the substantial achievements of the Soviet Armed Forces in using surprise at the operational level during the Great Patriotic War, or its postwar application in such cases as the Warsaw Treaty's intervention in Czechoslovakia in 1968 or the coup de main executed in December 1979 in Afghanistan. Those very "successes" have contributed to Western fears of surprise attack. At the same time Lobov has pointed to the sinister implications of an increased Western interest in "stratagem" and surprise as means of supporting offensive operations, associated with what he considered to be a rising risk of war.¹²

Moreover, surprise figured prominently in the Soviet General Staff's conception of a theater-strategic operation, as it was taught at the Voroshilov Academy of the General Staff in the mid-1970s. While the lectures at that time did discuss the need for Soviet forces to possess a high level of combat readiness to meet an aggressor's surprise attack, they also acknowledged the advantages to be gained by offensive operations in the initial period of war.¹³ A general, combined-arms offensive in such a theater of military actions would begin with a air operation: "The success of the air operation is ensured by delivering surprise, massed initial strikes against enemy airfields where the first main body of enemy aircraft is concentrated, with first priority given to enemy nuclear-armed aircraft."¹⁴ Taken together, this robust interest in surprise among the Soviet military, when coupled with continuing ideological hostility, the closed nature of Soviet society, and the frequent confrontations of the postwar era, has reenforced a sense of impending military conflict and vulnerability within the West. In a fundamental way the military doctrines of both sides have been fed by this sense of ideologically-engendered conflict and self-perceived vulnerability. Often over the last four decades of the Cold War the West's perception of threat was shaped by its own sense of vulnerability and has been distorted, exaggerated, and misdirected.

Progress on confidence-building measures to address this problem has been quite rapid in the last few years, especially at the Stockholm CSCE Conference. These measures have, like the INF Treaty, embraced the application of intrusive verification measures throughout Europe from the Atlantic to the Urals and have set the stage for further proposals in this direction. Recent Polish-Soviet proposals for the creation of a Center for Prevention of Surprise Attack in Europe have championed such an effort within the context of the CSCE process and would seek to reduce such misperception by providing for the timely exchange of information and consultations among those states.¹⁵ The acceptance of such verification measures and the subsequent proposals of still further efforts in this area represented a profound break with past Soviet/WTO positions and involved some very fundamental changes in world-view upon which Soviet/WTO military doctrine had been based in the past.

SOVIET MILITARY DOCTRINE: AN HISTORICAL PERSPECTIVE

In the Soviet case, the historical roots of military doctrine can be traced back to the first decades of the twentieth century, when military reformers and theorists sought to come to grips with "modern war" in the wake of their experience in the unsuccessful Manchurian Campaign of the Russo-Japanese War, 1904-1905. By 1911-1912 these reformers were calling for a "unified military doctrine," which they referred to "as the summary of the leading views accepted in a given army in a given era... to secure the mutual understanding of leaders and executors."¹⁶ That the formulation of such a concept coincided with the initial reformulation of military art to take into account the problem of conducting operations with modern combined-arms forces within vast continental threats should be noted.

Although tsarist reformers from the Nikolaevsk General Staff Academy were silenced by Nicholas II and unable to impose such concepts upon the Russian Army before war and revolution tore it asunder, their legacy to the young Red Army has proven significant.¹⁷ In the wake of total war, social revolution, and civil war, the issue of a unified military doctrine was raised again and given a new content, reflecting historical experience and ideological assumptions. In this case the synthesis of the views of tsarist general staff officers in Soviet service [voyenspetsy] regarding the demands of modern war and the ideological assumptions of military theorists within the ranks of Communist Party, notably Frunze and Gusev, created a new form and a new content for a unified military doctrine. In this context the category "military doctrine" emerged under the banner of a unified military doctrine for the Soviet Republic. Its modern form, a bifurcation into political and military-technical aspects, emerged. The political side of military doctrine became the domain of the Communist Party and found its expression in that Party's military policy. The vanguard role of the Party in

guiding the Soviet State and society extended into and fused with the military policy of the State. Ideological categories, based upon Marxism-Leninism's assumptions about the causes of war, the nature of imperialism, the role of advanced capitalist states in the international system, and the consequences of uneven development shaped that policy. The just struggle of the working classes against capitalist oppression was seen as the moving force of history, capable of bringing about the world revolution, abolishing exploitation, and removing the very source of war itself. World War I and its political content became the dominant paradigm of war under what Lenin called "imperialism, the highest stage of capitalism." In this fashion Lenin gave a new and deeper content to Clausewitz's concept of war as a continuation of politics by other, i. e., violent, means." In this case politics became the vehicle of a continuing class struggle within the context of a total war between coalitions of capitalist states, organized according to a "barracks capitalism."¹⁸

At the same time the experience of intense class struggle, civil war, and foreign military intervention shaped the mentality of several generations of Soviet leaders. This siege mentality, forged during the Civil War and Intervention, persisted in seeing Soviet Russia as an isolated bastion, surrounded by hostile capitalist powers with whom it was possible to make temporary tactical accommodations but with whom over the long-term the Soviet State was locked in a life and death struggle for survival. Out of this political content of military doctrine emerged a powerful secular theory for a just war in defense of socialism. The practical implications of these propositions for Soviet military doctrine were the creation of a relatively stable, ideologically-conditioned definition of the threat, largely immune to or slow to respond to other sorts of shifts in the international system. Although there have profound changes in the political content of Soviet military doctrine since the 1920s, legacies of this mentality, as Soviet authors have noted, remain a part of Soviet thinking on national security policy down to the present.¹⁹

THE POLITICAL ELEMENT IN SOVIET MILITARY DOCTRINE

The political content of Soviet military doctrine defines the threat, addresses the probability of war, defines the nature of such a conflict, articulates the terms and conditions for war termination, and determines the burden which Soviet society is expected to bear as a consequence of these assumptions regarding future war. In its earliest, most radical form, some Soviet political and military spokesmen looked upon the Red Army as a device for carrying the World Revolution outside the Soviet Republic. Mikhail Tukhachevsky spoke of the Red Army as a crucial engine in bringing about "revolution from without." Although his campaign beyond the Vistula ended in defeat in

August 1920, the notion that the advancing Red Army would carry Soviet Power into the areas it would occupy remained a consistent theme in Soviet military thought, giving a revolutionary subtext to that doctrine. As V. K. Triandafillov pointed out in 1929 in his discussion of operational art and the conduct of successive deep operations:

Enormous work involving the Sovietization of regions captured from the enemy will fall to the political apparatus. Major successive operations, given favorable conditions, may over the period of 3-4 weeks lead to the liberation of territory with frontage and depth of 200-250 kilometers. If small states are involved, this signifies that one must cope in a short time (2-3 weeks) with the Sovietization of entire states. This could mean 3-4 weeks of Sovietization of extremely large areas of larger countries are involved.... Here, from the very outset one must achieve a high-quality and reliable apparatus dedicated to the ideals of Soviet power, and people capable in deeds of demonstrating to the population of newly-captured areas the difference between the Soviet and the capitalist system must be put into place.²⁰

In this fashion a just war in defense of the gains of socialism could also contain a revolutionary element and in the process of its waging become a war of annihilation against the social institutions of the opposing society, bringing about the military-political extermination of any non-Soviet order in the rear of the advancing Red Army.

Since the 1920s Soviet military doctrine has assumed a basic and profound asymmetry between the political economy of war in capitalist and socialist societies. In the former, militarism and imperialism were assumed to be the dominant forms of mature state capitalism, while under socialism, in the face of the threat of total war there was a profound need for "militarization" [voyenizatsiya] in which civil society and the economy were organized so as to support the military effort, so that the correlation between economic, scientific, and technical potentials with military potentials approached 1:1. Such an organization promised a significant ability to mobilize the entire society for defense.

While such a drive in the mid 1920s under the socio-political conditions of Lenin's New Economic Policy may have represented no more than an effort to overcome the consequences of backwardness and uneven development and improve the defenses of the young Soviet State, under Stalin these attributes took on much more sinister implications for the outside world and promoted simultaneously what were profoundly unhealthy developments within Soviet society. Frunze's concept of a war economy [voyennaya ekonomika], prepared in peacetime for the

worst ravages of modern war, gave way to a system of totalitarian controls over all aspects of life. The political content of military doctrine under Stalin embraced a robust commitment to Realpolitik, a willingness to practice Machtpolitik, and a profound commitment to a revolution from above embracing a program of domestic terror and repression. After 1928 and the Shakhty Trial the linkage between the external counterrevolution and the internal counterrevolution became the justification for mass terror, secrecy, and a regime which repressed and tried to eliminate or subvert the moral autonomy of its citizens in the name of historical necessity.

These changes occurred simultaneously with a major recasting of Soviet military art, the military-technical side of Soviet Military Doctrine. In this case mass, mechanized forces and tactical aviation became the means to conduct deep battle and deep, successive operations. Thus, there arose a symbiotic relationship among the Stalinist war economy, the totalitarian control of society, and mass, mechanized warfare, which, while disrupted during Stalin's blood purge of the military, survived and legitimized itself during the Great Patriotic War.

Soviet domestic political realities, when coupled with the ruthless Machtpolitik of the late 1930s, made it extremely difficult for the Western democratic politics to overcome ideological fears of revolutionary socialism and recognize the need for common security efforts in the face of the rise of Fascism in Italy, National Socialism in Germany, and militarism in Japan. The result was a failure of collective security and World War II. Ideological xenophobia and mass terror cost the Soviet people dearly in the first years of their heroic struggle against Nazi aggression. Wartime collaboration between the Western Allies and the Soviet government, although based upon immediate mutual interests, did not survive the end of hostilities.

In part, this was a function of divergent interests, a logical consequence of the bilateral international system that made the victorious superpowers the arbitrators of a war-ravaged and prostrate Europe. However, two other factors also shaped that confrontation. The US atomic monopoly, which seemed to place in Washington's hands an political-military instrument of unheard of power, threatened the very hard-won gains achieved by the Soviet Union at such great cost during the war. The domestic realities of renewed terror within Soviet society and the leadership's efforts to expand that order into Eastern Europe in the wake of the advancing Red Army increased the West's distrust toward the Soviet Union.

MILITARY DOCTRINE AND THE "MILITARIZATION" OF THE COLD WAR

In the immediate postwar years, as the Cold War began, those same features of Soviet society which had raised Western anxieties in the 1930s reappeared with a vengeance to heighten fears and contributed to the militarization of the Cold War by making the Soviet "threat" all the more uncertain regarding both intentions and capabilities. The ideological content of containment as enunciated by George Kennan and others postulated a compelling need to check Soviet expansion, while the West waited for internal changes in Soviet society, which would make it more agreeable partner in a postwar international order. The realities of the anti-cosmopolitan campaign of 1947-1949 and the imposition of Stalinist regimes and mass terror in Eastern Europe contributed to a Western sense of threat when the military realities of demobilization and Soviet domestic reconstruction should have suggested a reduced military danger. In the face of the American atomic monopoly and its own vulnerability, the Soviet Union concealed its weaknesses, pressed for hegemony in Eastern Europe, and applauded the victories of wars of national liberation and revolutions over imperialism. In its turn, the United States began to identify the Soviet "threat" with the expansion of communism anywhere on the globe and in the wake of a series of crisis in Europe, especially Berlin, and events in Asia, i. e., the establishment of the Peoples Republic of China and North Korea's invasion of the South, moved towards a militarized containment. The result, embodied in NSC-68, was a peace-time military burden of unprecedented scope and an associated commitment to seek collective security arrangements, including the formation of the North Atlantic Treaty Organization and the subsequent entry of the Federal Republic of Germany into that alliance.

While it is true that in the wake of Stalin's death the worst features of the Stalinist system were mitigated to some extent, i. e., mass, random terror declined and external contacts were expanded, the broad features of this Stalinist mentality remained in tact and continued to shape the content of the political side of military doctrine, postulating an on-going ideological struggle between socialism and capitalism and justifying the maintenance of offensively-oriented, mass, mechanized forces. Furthermore, the Soviet acquisition of atomic weapons in 1949 and the US-Soviet race to procure nuclear weapons and delivery systems heightened Western fears of such a conflict. At the same time secrecy about the scope and extent of the Soviet military effort in the post-Stalin period contributed to threat magnification and misperceptions regarding the actual capabilities of Soviet forces, i. e., the so-called "bomber and missile gaps" of the late 1950s and early 1960s. These, in turn, facilitated a set of bureaucratic distortions in the Western response, generating greater efforts and infusing an ever-growing military component into each political crisis in this period.

During these first years of the East-West nuclear confrontation there was a stunning lack of sophistication on both sides regarding the central realities of the nuclear era. In part, this was the consequence of military analysts' inability to grasp fully the revolutionary implications of these new weapons of mass destruction. However, a more profound and disturbing aspect of the problem was the inability of the two superpowers and their allies to find an effective mechanism for political-military dialogue regarding these weapons and the emerging "security dilemma." Even when Nikita Khrushchev embarked upon force reductions in the late 1950s, his rocket rattling and claims that Soviet factories were turning out new long-range missiles like sausages obscured what was already a difficult and clouded assessment process. Protracted crisis over the German Question and the status of Berlin made conflict seem imminent to many in the West.

Soviet secrecy, a function of both domestic circumstance and perceived inferiority, proved a major stumbling block and contributed to a Western drive to develop ever-more advanced weapons systems and accompanying national technical means to provide intelligence data on the dimensions of the military threat and imminence of global, thermonuclear war. These trends culminated in the Cuban Missile Crisis of October 1962. The sobering effect of that crisis for both sides set in motion a search for means of crisis management, even as each side continued to modernize and develop its arsenal of strategic weapons.

The military realities of such arsenals had a most contradictory impact upon the military-political postures of East and West over the last twenty-five years. On the one hand, Western strategic thought has emphasized the implicit security dilemma created by nuclear weapons, i. e., any search for absolute security at the expense of the other power must undermine the security of that power and its allies. At the same time the United States and NATO have seen nuclear deterrence as the foundation upon which general deterrence has rested. Indeed, the enunciation of "Flexible Response" and "Forward Defense" as the keystones of NATO's security policy in the late 1960s was based upon a linkage of conventional, theater, and strategic nuclear capabilities to enhance deterrence and extend it across the spectrum from conventional war to strategic nuclear exchange.

In this context the series of political declarations by the Soviet leadership since the 1950s regarding the non-inevitability of war, no first use of nuclear weapons and "no victor" in a nuclear war has had the effect of suggesting that the political side of Soviet military doctrine has changed in response to both geo-strategic, political, and military-technical shifts. With the achievement of nuclear parity in the early 1970s, the Soviet Union's commitment to the maintenance of large,

offensively-oriented conventional forces in Eastern Europe raised fears in the West that the USSR was intent upon making the political-military situation in Europe safe for conventional war. Soviet military commentators, who insisted on treating nuclear war within the pre-nuclear context of an extended class struggle between socialism and imperialism, still clung to the notion of victory, even in the face of dire risks involved for all humanity in any nuclear exchange, suggesting a profound asymmetry in Western and Eastern understanding of deterrence.

In Western deterrence thought, the only purpose for nuclear weapons is to ensure that nuclear weapons are not used. No matter how elaborate the strategies and how sophisticated the options under consideration, it is the very "unthinkableness" of the use of these weapons which has made them seem so vital to ensuring peace. The West set about creating a condition of "general" deterrence in the hope that it would not be forced into another crisis, where a crisis situation would force it to rely upon "immediate deterrence," as was the case during the Cuban Missile Crisis. In this regard, a complex set of measures, ranging from political declarations of will to defend allies, maintenance of credible deterrence forces, and arms control, have played a major role.²¹ SALT I, the ABM Treaty, and the negotiations for SALT II seemed to provide a structure for the strategic nuclear competition, placing limits upon some programs and directing nuclear modernization on both sides towards the development of counter-force capabilities.

Soviet concepts of war prevention seemed to rest upon a military theory of "deterrence by warfighting capabilities," linked with a political-ideological struggle to prevent war.²² At the same time the USSR retained a massive superiority of conventional forces, deployed forward in the Groups of Soviet Forces in Europe. These forces, which had been restructured for a nuclear battlefield in the 1960s, were by the 1970s equipped and trained to fight conventionally in operations where nuclear weapons might be employed. In the event of war they were tasked with carrying the war immediately into enemy territory and their first priority tasks were the destruction of enemy nuclear systems and troop control in the theater of military actions.²³

The era of detente concealed this basic contradiction. The combination of strategic arms control and Ostpolitik of the early 1970s made it seem that East and West had found a means of reducing political tensions and managing, if not reducing, their military competition. Yet, Western proponents of detente persistently linked relaxation of international tensions with more general settlement of disputes outside of Europe. The Soviet leadership rejected such linkages and followed a policy of supporting anti-Western, revolutionary movements in the Third World and embarked upon a aggressive policy of arms transfers. In the wake of the withdrawal of U. S. forces from Vietnam and

the subsequent victory of the North, it seemed that American will and power were on the decline. These actions undermined political support for detente, which was on the wane by the time President Carter and General Secretary Brezhnev signed the SALT II agreement in 1979.

By the late 1970s the political situation had changed drastically. Instability in the Middle East reached a new high with the Iranian Islamic Revolution. The United States found its position in that region deteriorating drastically as its allies' dependence on oil from that region increased. A protracted and humiliating hostage crisis undermined Washington's credibility. In this dangerous situation the Soviet leadership followed a more adventurist foreign policy and ignored the long-range consequences of such a course. These trends culminated with the Soviet military intervention in Afghanistan. As a recent article in Literaturnaya gazeta has pointed out, General Secretary Brezhnev chose to ignore President Carter's effort to extend detente to other regions and to recognize vital US interests in the Persian Gulf. As seen from Washington, the coup de main against Kabul and the simultaneous large-scale military intervention were the first steps to a military-political offensive against the West in that region.²⁴

As a result, these political events set in motion a Western military build-up, begun by the Carter Administration and continued by the Reagan Administration. With the collapse of detente and the renewal of the Cold War, military-technical aspects of military doctrine were unchecked by political restraints, and this led to heightened fears and greater mutual distrust. The political crisis in Eastern Europe associated with the rise of Solidarity in Poland and the subsequent imposition of martial law further increased the sense of political confrontation and undercut support for arms control in the West.

In the meantime the Soviet Union maintained nuclear parity, retained a vast conventional superiority, and undertook the modernization of those forces. This political-military situation created anxiety in the West about the viability of NATO's conventional forces to sustain a defense and delay nuclear escalation in the face of a Soviet/WTO conventional attack. The offensive orientation of Soviet conventional forces, i. e., their reliance upon a tank-heavy, combined-armed force, structured, trained, and deployed to conduct high-speed, offensive operations in the initial period of war, further intensified such concerns among NATO defense planners. While during an era of detente and relaxation of tensions NATO's response had been measured and did not preclude pursuing strategic arms control agreements between the superpowers, now it took a more vigorous and determined form. NATO saw the deployment of new Soviet theater nuclear forces, i. e., the SS-20, in the late 1970s as an effort to negate NATO's ability to employ extended deterrence and to call into question

the links which had held "Flexible Response" together for over a decade. NATO's dual-track response of modernizing its own theater-nuclear forces while seeking an arms control agreement to ban such modern theater-nuclear weapons was intended to maintain the deterrence credibility of Flexible Response. The appearance and role of the modern, land-air, operational-maneuver group during the exercise Zapad-81 called into questions the Alliance's ability to fight forward in the face of a surprise theater-strategic offensive or to deal with Soviet second echelon forces, and led to the Rogers Plan to develop FOFA [Follow-On Forces Attack] capabilities, in which advanced systems based upon emerging conventional weapons were to be employed.²⁵ These efforts were intended to restore the conventional deterrence element within Flexible Response.

SOVIET MILITARY DOCTRINE AND DEMILITARIZATION

This situation continued with greater or lesser tension until 1985, when a new Soviet leadership began to articulate new concepts of security and to seek to remove those issues which had been at the source of Western anxiety. At the same time that leadership has sought to make the West more aware of those actions which have contributed to anxiety in the Soviet Union and the Warsaw Pact.

Since 1986 Soviet political declarations have addressed this general concern for human values outside of the narrow context of class struggle and the triumph of socialism, thus placing an important caveat upon long-held assumptions about the nature and limits of a just war in defense of socialism. The idea of "human values" taking precedent over class struggle in the nuclear era, thereby negating Lenin's reinterpretation of Clausewitz's dictum that war is a continuation of politics by other means, does have profound implication for a East-West dialogue regarding deterrence and war prevention.²⁶ At the same time the Soviet leadership by its deeds underscored the military significance of its words by accepting intrusive inspection during the Stockholm CSCE Talks and by negotiating the "double zero" solution to theater-nuclear forces in the INF Treaty. This combination of words and deeds was greeted initially with cautious optimism in the West.

Simultaneous efforts at reform associated with General Secretary Mikhail Gorbachev's programs of glasnost and perestroika brought about major and positive changes in Soviet domestic politics and set the stage for the recent transformation of Eastern Europe. Most promising of all, Gorbachev's domestic agenda seemed to recognize the serious costs which the Stalinist war economy and tradition of Machtpolitik had imposed upon Soviet society and the socialist community. These shifts made it possible for NATO to begin a profound reconsideration of the political-military confrontation in Europe and set the stage for

talks on the reduction of conventional forces in Europe. Overt Soviet acknowledgement of existing asymmetries and announced unilateral reductions in forces contributed to this new climate and have provided a major opportunity to address the military-technical aspects of WTO and NATO doctrine with an eye toward increasing strategic stability at reduced levels of forces.

Soviet civilian analysts have recently noted the political costs which the USSR paid for failing to take into account the political ramifications of military-technical decision to deploy such weapons.²⁷ Such political analysis of other military-technical issues has recently been taken up by Foreign Minister Eduard Shevardnadze, who acknowledged that building the Krasnoyarsk Radar Installation had been in violation of the ABM Treaty and that the Soviet military intervention in Afghanistan had violated norms of behavior, ignored human values and involved "gross violations of our own laws, intra-party and civil norms and ethics...."²⁸ Such statements would seem to be the product of what Andrey Kokoshin has called "military-political science."²⁹ They certainly fit well with the call which Aleksandr Yakovlev made to Soviet social scientists and international affairs specialists to work closely with military scientists in formulating a new military doctrine in keeping with the requirements of an integrated, global system of security.³⁰

This effort, which has challenged a number of the most troubling aspects of Soviet military doctrine, has led to new arms control agreements. In conjunction with Gorbachev's perestroika and the sweeping changes now under way in the Soviet Union and Eastern Europe, it has set the stage for an even wider range of arms control and confidence-building measures. These developments in East-West relations, and especially the transformations now underway in the Soviet Union and Eastern Europe, have, however, created new possibilities for enhancing strategic stability at lower force levels by mutual, asymmetrical, verifiable agreements. Recent statements by Marshal Sergey Akhromeyev, former Chief of the Soviet General Staff and now, in retirement, advisor to Gorbachev on international security issues, suggested three principles to undergird a new security system: de-militarization, democratization, and de-ideologization. Taken together, these three principles mean a rejection of the use of force to resolve international conflicts, a rejection of the Brezhnev Doctrine's claim of right for socialist states to intervene in the internal affairs of other socialist states, and an attempt to shift the East-West confrontation from ideological grounds to one based upon international law.³¹ Regarding this legal framework of the new Soviet military doctrine, Marshal Akhromeyev has pointed to a broad set of agreements:

In the interests of its national security, the USSR is strictly fulfilling its obligations and will continue to observe its responsibilities according to the UN Charter, the Final Act of the Helsinki Agreement, the documents of the Stockholm Conference on Confidence-Building Measures, Security and Disarmament in Europe, as well as bilateral agreements between countries and the universally accepted norms of international law.³²

Akhromeyev points out that in order to create an integrated security system the Soviets look to a set of arms control agreements, covering a wide range of issues, to bring about significant cuts in forces and increased confidence. To these measures he has added a mutual rejection of the use of force by NATO and the WTO.³³ These propositions, taken together, do represent a significant shift in content of the political side of military doctrine.

At this juncture it behooves both sides to deal effectively with military-technical questions which must be resolved to make such measures effective means of enhancing security and reducing the risk of war.

REDUCING THE THREAT, MILITARY-TECHNICAL ISSUES

It is in this context that we turn to the military-technical side of Soviet military doctrine. Here the problem of threat perception and doctrinal change becomes more complex. A simple analysis of Soviet military capabilities from a NATO perspective would, even in the face of the elimination of certain theater-nuclear systems as a result of the INF Treaty and the unilateral reductions announced by President Gorbachev in December 1987 and now in the process of execution, still prudently find much ground for concern. Indeed, the existing asymmetry in ground force capabilities between NATO and the WTO -- now acknowledged by Warsaw Pact -- when linked with an offensive military posture have been the core problem, driving NATO's recasting of Flexible Response and the origins of the Rogers Plan for the development of FOFA.

The context of these capabilities have, however, changed over the last three years. The Stockholm Agreement for new confidence-building measures, embodying greater mutual transparency via intrusive inspections in the area of exercises, and the INF Treaty have affected correlation of forces and produced a climate in which a CFE agreement has become a very likely outcome. Moreover, the political context of such a treaty would be radically different today than only a year ago. Democratic developments in Hungary and Poland point to much greater political pluralism within the Warsaw Pact, which can act as a restraint on military adventurism. The opening of the border between the Federal Republic of Germany and the German

Democratic Republic and the promise of domestic political and economic reforms in the DDR hold out the promise of a peaceful resolution of the German question in keeping with European security needs and the just desires of the German nation for an end to the barriers which separated families and denied human liberty. The Soviet leadership by word and deed has renounced the Brezhnev Doctrine and tolerated a search by each of its East European allies for its own program of domestic reconstitution and reform, based upon greater non-Party participation in the reform process. Military cutbacks and reduced funding for defense among Warsaw Pact members further support a perception of reduced threat. Such positive trends have begun to reshape threat perception within NATO. They have created a climate for a rapid CFE treaty and the prospect of further negotiations on subsequent agreements.

Should such a treaty result in substantial asymmetrical reductions, which would transform the Soviet Western Group of Forces into a traditional covering army, structured to conduct a prolonged "premeditated defense" during the initial period of war but incapable of mounting an initial, surprise combined-arms offensive, then NATO's perception of the threat would, indeed, change. As this statement implies, much more would be involved than just parity at reduced levels of armaments. Fundamental adjustments in military art at the strategic, operational and tactical levels would have to be introduced. This would involve far more than "the dialectic of a more precise definition" of its [Soviet military doctrine's] content," of which General of the Army Salmanov has written.³⁴

Soviet security analysts, notably A. A. Kokoshin and General-Major V. V. Larionov, have addressed such a possible shift, offering a four-stage de-escalation ladder from offensively-oriented conventional forces, to counter-offensive - oriented, counter-stroke, and finally non-offensive defense.³⁵ As the authors imply, such a process would be a protracted one of mutual adjustment or unilateral actions undertaken in a benign political environment conducive to the creation of a new and vastly different security system for Europe. As Paul Dunay has pointed out, these efforts do represent an effort to "harmonize political ideology with military doctrine and military policy" thereby to "recover the leading role of politics in military affairs."³⁶ The keystone of such a process must be that it does not make Europe safe for the conduct of conventional warfare, should the political-military climate again lead to confrontation. Dunay goes on to affirm the need for a thorough discussion of the inter-connections between conventional and nuclear aspects of military art in each alliance's military doctrine and notes the positive response of Soviet military analysts to the appearance of the term operational art in U. S. military literature in 1982. Furthermore, Dunay has called for a thorough discussion "on future war, their preparations for it,

the whole area of military art--including strategy, operational art and tactics--as well as the force structure and military technology."³⁷ One would add to this list military science. For, as General-Colonel I. E. Shavrov and Colonel M. A. Galkin have pointed out, "In its essence, military science is the science of future war."³⁸

In this regard, the roots of Soviet military doctrine and the explicit linkage of its development with operational art take on greater significance. When the Warsaw Treaty Organization first announced its change in military doctrine, some Soviet civilian analysts, notably Andrei Kokoshin, stated that in repelling aggression "the fundamental way of action of the armed forces will not consist of offensive, but of defensive operations and combat actions."³⁹ At the same time, Minister of Defense Dmitriy Yazov stated that Soviet forces must be capable of mounting a successful counter-offensive to rebuff any aggressor. This counter-offensive capability encompasses the ability of Soviet forces "to mount a decisive offensive."⁴⁰ The capacity to mount such operations throughout the depth of an aggressor's deployments in a battle of annihilation could, when joined with covert mobilization, redeployments, and regroupings of forces, be used to "creep up to war" and achieve political-military surprise of operational and strategic significance, affecting the course and outcome of a future conflict.⁴¹ Such a possibility has been an explicit concern among Soviet military historians and analysts who have addressed the role and relevance of surprise in past combat experience to contemporary operational art.⁴² It is a concern shared by their Western counterparts when they address the current Soviet commitment to a theater-strategic "counter-offensive" capability.

This is particularly true if one engages in a review of the recent writings of Soviet General Staff officers on the changing role of strategic defense [strategicheskaya oborona] and "premeditated defense" [prednamerennaya oborona] within the context of the current scientific-technical revolution in military affairs. This theme began to receive attention as early as 1979. General-Major V. V. Turchenko raised the issue and noted the existing "dialectical unity and close inter-connect" between strategic offense and strategic defense. He went on to delineate two types of strategic defense: "imposed" and "premeditated." In the former the defender was compelled by military or political circumstances to adopt a defensive posture. In the latter the defender chooses and plans to be on the defense. He noted as a successful example of such a premeditated defense the Soviet defense during the Battle of Kursk in July 1943 and implied that under modern conditions the defender could use artillery and air "counter-preparations and the wider employment of offensive actions" in the defense to maintain steadiness [ustoychivost']. In this manner he discussed the growing offensive character of the defense, its dynamism

[aktivnost'] and stated that a successful strategic defense could "change the strategic situation in the theater to one's own advantage and create the conditions for seizing the strategic initiative and going over to the counter-offensive."⁴³

Down to 1984 Turchenko and other authors who addressed strategic defense did not question the primacy of the offense in fulfilling those tasks and missions necessary for successful war termination, but they did see profound changes in the impact of "the fire factor" upon the conduct of operations in the initial period of war. Linked with new requirements in intelligence for timely estimates of enemy plans and intentions, the employment of fire strikes by the defense could increase its stability and dynamism to the point where a maneuver defense was possible and potentially effective. General-Major I. N. Vorob'yev pointed to a certain "leveling [nivelirovka] of offensive and defensive actions."⁴⁴

Given the scale, scope, and intensity of such operations, the tasks before the defense had become more difficult and would require even greater depth in the layout of defending forces in a theater of military actions. The task before Soviet military science was the construction of both a theory and practical force requirements required to conduct such a defense. In 1981 General of the Army M. M. Kozlov, Head of the Voroshilov Academy of the General Staff, raised the issue of strategic defense as a major topic for study by Soviet military science.⁴⁵

The capital issue guiding the entire discussion of strategic defense in the early 1980s was the relationship between offense and defense under modern conditions, especially the appearance of long-range, high-accuracy advanced conventional munitions. Even those military scholars engaged in the study of strategic defense as a problem did not question the supremacy of the offense, and couched their calls for the study of strategic defense as being a matter of prudence. General-Major Turchenko reminded Soviet officers of the terrible costs paid in 1941 for not mastering strategic defense, and saw as hubris any assertion that one would have overwhelming superiority at all times and in all directions to permit one "to conduct only active, offensive operations." The most crucial problem facing strategic defense was the development of countermeasures to deal with a breakthrough of enemy mobile forces into the depth of the defense. Turchenko looked to engineering support and mobile obstacle-laying means to provide greater stability.⁴⁶ Both Turchenko and General-Colonel I. G. Zav'yalov expressed a strong preference for a well-constructed, premeditated defense, possessing great stability and based upon aggressive counter-strikes and attacks, as the preferred defensive posture in the initial period of war.⁴⁷ Yet, on the competition between offensive and defensive combat potentials Zav'yalov stressed the continuing hegemony of the former over the latter.

In this confrontation, superiority always goes to that side which better uses the combat, and primarily offensive potential, who has the higher level of military art, better works out the methods of combat actions in the offense and defense, and has the higher morale among the troops.⁴⁸

He reminded his readers that while the significance of the defense was on the rise,

. . . it does not follow to conclude that it should be given preference over the offense. One can only speak about increasing the ability of the defense to conduct decisive actions leading to the destruction of major groupings of enemy forces and the achievement of a temporary superiority over him. In the final analysis only the offense can deliver final victory in war.⁴⁹

In this regard the discussions of strategic defense in no way undercut the emphasis upon "deceive offensive methods of combat action" with regard to the military-technical side of Soviet military doctrine.⁵⁰

In 1984 in a rare article on an historical topic, Marshal Sergey Akhromeyev, who was soon to become Chief of the Soviet General Staff, used the Battle of Kursk as the turning point of World War II to bring into public discussion the General Staff's earlier concerns regarding strategic defense and the continued relevance of "premeditated defense" under modern conditions. Kursk served as his historical analogy, as it would subsequently for a number of Soviet analysts.⁵¹ More recently Marshal Akhromeyev attributed the shift to the defensive as a response to Western concerns about Soviet offensive capabilities:

Guided by the experience of WWII, we considered the offensive to be the main method of warfare for our armed forces. Until recently, we planned to rebuff an aggression by using both defensive and offensive operations. We have addressed the western concerns on this score and modified our military strategy. In the event of an aggression, the Soviet armed forces will initially be engaged in retaliatory defensive operations.⁵²

The feasibility of a strategic defense based upon premeditated defense had been a topic of hot debate in the Soviet military during the two years preceding the WTO Political Consultative Committee's announcement of doctrinal change. Down to 1984 strategic defense had been no more than an alternative posture in keeping with the realities of warfare in continental TVDs, where the strategic defense would be no more than a temporary measure, imposed by political or military conditions and based upon the need for economy of force in some sectors of

the theater. But in 1984-1985 Soviet officers began to address the radical implications of technological change. Regarding the threat to the USSR, Marshal N. S. Ogarkov, Chief of the General Staff, 1977-1984, was quite explicit:

The concept [AirLand Battle] proposes the surprise initiation of combat actions simultaneously by air, naval and ground forces with the extensive use of the latest conventional, precision-guided means of armed struggle and of reconnaissance-strike complexes at great depth with the objective of inflicting maximum losses on enemy troops, the achievement in the shortest possible time of overwhelming superiority against him, and a subsequent offensive for the seizure of his territory.⁵³

What Ogarkov described as a NATO first-strike concept for using precision fire in the initial period of war other Soviet military authors discussed in more general terms two years later, reflecting dominant trends in the evolution of the defense. Here some authors pointed to a "leap" [skachok] in the means of conducting an operational defense, which had radical implications:

In national and foreign literature it has been noted that the modern defense has begun to carry a defensive-offensive character. Defending large formations and formations at the present time are able to confront the massed fire actions and strikes of powerful enemy tank groups, to successfully counter, and in favorable conditions to break the offensive. Foreign military specialists have noted that by means of powerful fire strikes, stubborn holding of important lines and areas in conjunction with the launching of powerful counterattacks and counterstrikes, actions in the rear of the attacking forces by raising detachments, assaults of sabotage-reconnaissance groups can inflict upon him a defeat, which will force the enemy to give up active prosecution of the attack and, in turn, allow the defending forces to go over to the attack.⁵⁴

These authors thus linked together front, rear, and deep battle in such a fashion so as to suggest that new technologies, especially high-accuracy, deep-fire weapons with the ability to strike targets on a real time basis, were transforming the nature of deep operations to increase the role of maneuver by fire and to reduce the effectiveness of tank-heavy forces in such a combined-arms offensive operation. Reconnaissance-strike and reconnaissance-fire complexes were noted as weapons which had the effective destructive power of tactical nuclear weapons. The authors also noted the possibilities of using a wide range of systems and platforms "to create an antitank defense throughout the entire operational depth by equipping them with large quantities of antitank systems, used in conjunction with the mass

employment of mine fields and other types of obstacles."⁵⁵ The stability and dynamism of such a premeditated defense held out the prospect of at least negating an attacker's ability to sustain a seamless deep operation without regrouping his forces. Moreover, the defender might by counterattacks and counterstrikes rob the attacker of the initiative and create the preconditions for the mounting of a counteroffensive to achieve the annihilation of the attacking force.

These developments in the area of military art and technology coincided with the reformulation of Soviet/WTO military doctrine and provided a military-technical rationale regarding the increased feasibility of premeditated defense. General of the Army Dmitriy Yazov, the newly appointed Soviet Minister of Defense, addressed this problem in 1987. In his presentation it was clear that the so-called "Kursk paradigm" for a successful premeditated defense and a subsequent counter-offensive had infused new content into an old category. In this case a net assessment of the balance between offense and defense had made it possible to consider standing on the defense in the initial period of war, provided a sufficiently deep defense, based upon modern conventional weapons and relying on dynamic tactical and operational counter-strikes could be created. Yazov stressed the utility of conducting "a surprise counter-preparation" by launching fire and aviation strikes against the entire depth of the attacker's operational deployments and conducting intense electronic warfare to disrupt the enemy's ability to control his troops and forces. Such actions could bring about the defeat of the attacker and create the conditions for the counter-offensive. He described these tasks as "more decisive" than in the past and stated that the increasing fire and strike capabilities of fronts, armies and divisions as redefining the content of these tasks.⁵⁶ They did, however, only set the stage for the decisive counter-offensive.

Thus, General of the Army Yazov still kept strategic defense in a theater-strategic operation subordinated the offensive, which remained the instrument of war termination. Deep offensive operations carrying the war into enemy territory and destroying the enemy force throughout the depth of his dispositions were still intended to impose a military solution in a future war.

Soviet military doctrine looks upon defense in the capacity of the basic type of military actions to repulse aggression. It must be reliable and steadfast, stubborn and active, calculated to stop the enemy offensive, to drain it, to prevent loss of territory, to strive for the destruction of the invading enemy groupings.

However, it is impossible to destroy an aggressor by defense alone. Therefore, after the repulse of the attack troops and naval forces one must be able to mount a decisive

offensive, which it will be necessary to conduct in a difficult and tense situation of confrontation with a well-armed enemy.⁵⁷

Given what was correctly perceived by NATO to be a substantial superiority of Soviet/WTO conventional forces in Europe, such a counter-offensive posture could not negate NATO's fears that the USSR and its allies were still committed to deterrence by war-fighting.

In a discussion of defense during the initial period of a future war, General of the Army Salmonov emphasized two, mutually-related rationales. First, the defending force could under favorable conditions bleed the enemy and create the pre-conditions for the above-mentioned counter-offensive. Second, the force could serve as means of making the enemy think before attacking by precluding the attacker's ability to achieve decisive military-political results in the initial period of war. Accepting the utility of premeditated defense, moreover, seemed to be only prudent in the face of what he identified as NATO's enhanced combat capabilities, i. e., "completely new quality in the enemy's fire capabilities, a sharp rise in mobility of his strike groups, and the main means chosen by him to initiate hostilities, surprise attack."⁵⁸

According to General of the Army Salmanov, the appropriate answer to these capabilities is the application of advanced fire systems, i. e., reconnaissance-strike and reconnaissance-fire complexes, and for the defense to apply long-range, high-accuracy fire against the attacker from the start of hostilities.

We must have the ability to create in a very short time such a system of fire, by which in answer to the initiation of aggression the enemy would receive an immediate and crushing retaliatory massed fire strike, capable of sharply weakening [his] offensive potential even before that moment when he introduces his strike groups of the second echelon into battle.⁵⁹

To accomplish this task Salmonov has called for the study of the best means for seizing fire superiority and command of the air at the very start of hostilities.⁶⁰ Thus, in this fashion two historic aspects associated with the Kursk paradigm, i. e., a preemptive fire preparation and an anti-air operation, designed to break up the opponent's combined arms offensive before it can begin, were given a new content. In this case advanced conventional weapons would make possible a much more decisive use of maneuver by fire to accomplish this task, permitting the defender to exercise the initiative by striking preemptively throughout the depths of the supposed attacker. Under such circumstances the transition to the counter-offensive could, indeed, be rapid, almost instantaneous.

In the past the strength of the defense has been a function of choosing the terrain, but the defense had to give away the initiative. Modern deep-strike systems hold out the prospect of permitting the defense to engage a would-be attacker before his forces can reach the line of contact and by such fire strikes inflict devastating losses during the approach march. The outcome of such an operational-tactical situation would depend upon the comparative abilities of the opposing sides to adjust to the radical increase in the dynamics of combat, brought about by such new capabilities. These dynamics would manifest themselves in the form of rapid and frequent shifts by tactical units from offense to defense and back. Joined with the infusion of air mobile and air mechanized concepts of deep raiding, the further intensification of the struggle between tank and antitank systems, the advent of practical battlefield lasers, and the introduction of new means of automated troop control, these developments would produce a very "unconventional" conventional warfare.

As Colonel Stanislaw Koziej of the Polish Armed Forces has pointed out, these trends will reshape tactics along five, mutually-connected lines:

. . . the transformation of traditional ground combat into air-land combat, broadening the role of mobility in all troop actions; the development and generalization of taking combat actions within enemy formations, especially raiding actions; the initiation of battle at increasingly greater distances; [and] the growth of the significance of the "information struggle," which has as its objective to steer the enemy in the direction of one's own plans and intentions.⁶¹

Taken together, these concepts imply a major recasting of tactics and operational art to reflect the enhanced role of maneuver by fire and a simultaneous "leveling" of offense and defense. The conventional combined-arms solutions adopted to enhance maneuver in the depths of the enemy's dispositions had hinged on the echelonment of forces to provide shock in a breakthrough sector and then a mobile group to engage in exploitation. New circumstances were making it possible to use a combination of maneuver by fire and an air second echelon to conduct deep battle and deep operations in a context where offense and defense had melded together.

The accelerating processes of change have assumed the character of a new revolution in military affairs, in which the classic order of innovation in military art was radically transformed. The dominant model of technological change beginning at the tactical level and generalizing from there to operational art and strategy had been based upon the struggle for technological initiative, in which each innovation took on its

full import when the weapon had reached maturity of design and been acquired in mass, when troops had been trained in its employment, and when concepts for its use in combined-arms combat had reached full development.⁶² This approach had given way in the late 1950s to one dominated by technological changes at the strategic level, associated with the nuclear-rocket revolution in military affairs. In the 1980s Soviet analysts have assumed that the current "leaps" had set the stage for interconnected changes in military art, simultaneously affecting tactics, operational art and strategy, and raising a host of issues relating to force posture and structure.

Only three such periods have been experienced by the Soviet military in the past: the first was the military revolution associated with deep battle and deep operations and the militarization of the Soviet economy under Stalin. In that case tactical capabilities had culminated to reshape combined-arms operations. The second case was in the 1950s with the emergence of nuclear-rocket weapons, which initially seemed to recast military strategy, reduce the role of operational art and reduce tactics to maneuver on an irradiated battlefield. The very expansion of the arsenals on such weapons on the opposing sides had, however, negated any military utility associated with nuclear weapons. The third revolution, associated with the developments in automated troop control, long-range precision-guided munitions, radio-electronic warfare, and even more advanced "weapons based upon new physical principles," by the early 1980s was simultaneously reshaping tactics, operational art and strategy, not only calling into question the long-established hegemony of the tank in deep maneuver, but also radically changing the calculations associated with density of forces and means. Moreover, this military revolution, like the mechanization revolution of the early 1930s, would have profound consequences for the economy and require a very different approach than Stalin's war economy. Recently Soviet authors writing on the evolution of military art described the current situation in the following terms:

New means of armed struggle have brought about a transformation in views simultaneously in all areas of military art. The accelerated development of the material-technical base, which the scientific-technical revolution has provoked, has sharply curtailed the period of changes which take place in military art. New means of conducting military actions rapidly produce new requirements in armaments, the perfection of their tactical-technical features, and the organization of troops, and at the same time produce an urgent order for their further development, which, in turn, leads to real changes in military art.⁶³

These authors point to the application of such new weapons and concepts with such established forms as the "theory of deep

operation" and the "tactics of deep battle," but note that this has taken on a new content because massing of means has replaced massing of forces and maneuver by fire has superseded maneuver by combat forces. If in the past the objective was to encircle and destroy an enemy operational grouping, current concepts speak of attacking an enemy force from within, maneuver by fire, and simultaneous destruction throughout the depth of the enemy's dispositions by a combination of fire, penetration, and aerial envelopment.⁶⁴ Such tactical and operational concepts depend upon the ability of units and subunits to make rapid transitions from attack to defense and back, and underscore the need for a restructuring of such units to fight the combined-arms battle more effectively.

In this context the Soviet military's current "defensive" restructuring deserves to be treated in the same manner as Moltke the Elder, treated military history: The declarations are "the truth, only the truth, but not all the truth." Defensiveness at a time when there has been a leveling of offense and defense seems to be no more than a prudent adaptation to the emerging, post-mechanized battlefield. A declared counter-offensive posture in this context can not be reassuring by itself. Force reductions, the removal of certain types of forces, and greater transparency, however, are certainly promissory notes. What is required are military-to-military discussions, where we move beyond Moltke to Svechin to discuss "the truth, the whole truth and nothing but the truth."⁶⁵ Gorbachev's announcement of unilateral Soviet force reduction in late 1988 and the Soviet/WTO willingness to accept asymmetrical force reductions have been key steps toward this process. Now we need to discuss candidly those trends which will reshape the future battlefield so that in a post CFE environment strategic stability can be maintained and defensive "steadiness" enhanced without making Europe safe for conventional war.

At a minimum, conventional deterrence will rest upon the ability of both sides to demonstrate that they can conduct operations in theater. Proposed postures which do not transcend tactical issues have no promise because they do not address the synergism of combined-arms operations, linking together close, rear and deep battle. Combat can not under modern conditions be conceived of as linear, confined to the line of contact. Instead, the ability of each side to maintain the steadiness of their defense will depend upon successfully executing a number of missions: close theater operations, theater-deep operations, theater rear projection operations, theater reinforcement, theater sustainment, and theater command and control.⁶⁶

Close theater operations cover the area from the rear boundaries of NATO corps to the rear boundaries of WTO armies, roughly a zone 100-150 km deep. It is in this zone that tactical successes can be translated into operational ones. If in the

past the central threat to strategic stability was the Soviet/WTO ability to use tank-heavy forces to achieve breakthrough and pursuit into the depth of the defense, current trends suggest a shift in the balance of combined arms towards a force more compatible with the requirements for maneuver by fire. The lay-down of forces in this zone is important.

Proposals that focus on divisional combat power, while ignoring the role of NATO corps and army and WTO army and front assets in augmenting combat power in attack sectors, do not address the core problem.⁶⁷ First, a NATO corps is both the keystone of operational art and the capstone unit of national combat power within the alliance. Yet, Soviet military organization and experience stresses the role of army, front, and multi-front operations as the proper forms of operational and strategic-operational maneuver. This organizational asymmetry must also be addressed, if strategic stability is to more than a mechanical balance.

Second, such proposals with a divisional focus fail to address the problem of a methodology for figuring the combat potentials in each zone and area and thereby dealing with the problem of substituting elements of one combat arm for another. They do not address the dynamics of modern operations.⁶⁸ Candid discussions of the operations research techniques used by the Soviet General Staff to establish the correlation of forces necessary to bring about a decisive breakthrough under modern conditions is needed to support such proposals. Those techniques are based upon a well-developed, sophisticated methodology. To ensure a symmetry between strategic stability in a pre-war period and defensive steadiness in the initial period of war, it is necessary to apply that methodology to current and future force postures and lay-downs.⁶⁹ At a minimum what is now required are theater models, which taken into the Soviet General Staff's methods for modelling and calculating correlation of forces, including a frank discussion of the quantitative-qualitative indicators of combat potentials and coefficients of commensurability [koeffitsenty soizmerimosti]. Operational-tactical forecasting based upon mathematical models and taking into account the tactical-technical features of weapons system must be discussed in some detail. In the past such methods supported the optimization of combat potentials.⁷⁰ Now they should be turned to the task of optimizing strategic stability.⁷¹ The most crucial issues for discussion concern the criteria used in such a method to determine combat potentials and the validity and effectiveness of such a methodology for modelling deep operations.

Theater deep operations are designed to interdict operational and strategic reserves, reinforcements, and supplies in order to reduce the opposing side's ability to generate, sustain, shift and control forces throughout the theater. Given

the very different logistical situations confronting the two alliances, one dominated by a distant maritime power and the other by a neighboring continental power, theater deep operations are critical to stopping the arrival and deployment of Soviet follow-on-forces. FOFA emerged as the application of advanced technology to this distinct mission. In Soviet literature, however, such advanced technology in the form of reconnaissance-strike and reconnaissance-fire complexes has emerged as a means of integrating deep fire into both the close and deep battles. The threat of "deep strikes" by NATO land-based and sea-based strike aviation and ALCMs and SLCMs has been cited as a key justification for a large air-defense capability in case of "conventional war" in Europe. "The developed system of Air Defense in modern conditions is a deterring factor, which supports the maintenance of military-strategic parity."⁷² Yet, from a NATO perspective the correlation of WTO/NATO short-range [up to 500 km] missile launchers in theater [11.8:1] suggests a massive initial strike capability to intradict and disrupt reserves, replacements, logistics, and control.⁷³ This is especially true when such systems are seen as part of a Soviet "air-land" operation, the modern manifestation of an old concept.⁷⁴ Lower densities of forces and increased reliance upon strategic trans-oceanic redeployment of forces in a warning period, without a significant reduction in such deep-strike forces could actually increase strategic instability.

Theater rear protection operations must be conducted to preserve the integrity of rear areas and their ability to support forces engaged in conducting close and deep operations. Each side must preserve its nuclear systems, LOCs and SLOCs, its theater stores, and ports and air bases from attack by diverse means of enemy attack, ranging from air attacks, and anti-SLOC actions down through airborne and air assault actions, to sabotage and diversionary actions. Threats to rear area support undermine strategic stability by compromising each side's ability to conduct combat operations, to sustain forces, to reinforce in theater and to control troops. For NATO Soviet SSNs operating in an anti-SLOC role, when joined with air and missile strikes and raids against infrastructures, threat a very vulnerable element, its vital ties with the transatlantic base of support.

Theater reinforcement is vital to strategic stability because of the high rate of destruction and waste associated with modern combat. Without an adequate flow into theater of fresh troops and equipment, one can not sustain combat operations for any protracted period. NATO and WTO reinforcements are both sensitive to timely arrival in theater. Soviet and WTO military art and training have stressed the need for rapid and effective force generation in theater. Continental geography has created an additional advantage for the WTO.

Theater sustainment addresses the arrival of additional men and materiel to regenerate the combat power of engaged units or to supply additional munitions, POL and supplies to sustain modern combat. Without such sustainment no combat operations can be conducted over a protracted period of time. Past military experience suggests that peacetime estimates of use rates will, in fact, be considerably off the mark, making the timely arrival of such stores critical to a viable conventional defense.

Theater troop control is crucial to ensure that the other tasks can be executed. It is troop control which makes possible the practice of operational art, linking tactical actions into a coherent whole in accord with a campaign design and translating operations into strategic success. In the past the troop control structures of the two alliances were radically dissimilar. NATO's emerged over time as the result of a set of compromises among sovereign states. In the past the political and military control mechanisms of the WTO reflected greater unity and centralization under an evident Soviet hegemony. That has changed recently but does not alter the fact that troop control is a capital aspect of any assessment of the balance of forces because it addresses those actions which can tie all the other types of operations and actions into a coherent whole.

There is a synergism involved in the accomplishment of all these tasks which far exceeds the realm of tactics and linear balances along the FEBA. To make a good CFE agreement which will contribute to strategic stability at lower force levels and reduce Western fears in the military-technical side of WTO doctrine, what is required is an agreement which acknowledges these tasks, considers the minimal requirements for their effective performance, and takes into account that potential for decisive offensive actions associated with the very synergism of these tasks in the initial period of war.

In the four paradigms laid out by A. A Kokoshin and V. V. Larionov as a "de-escalation ladder" from an offensive, to counteroffensive, counterstroke, and non-offensive defense, the authors offered a set of historical cases to cover paradigms two and three and suggested how these cases addressed the question of limitation on military actions. The historical cases, i. e., Kursk 1943, Khalkhin-Gol 1939 and Korea 1951-1953, might be worth examining in the context of the criteria described above. More importantly, it should address these paradigms within the context of force modernization. Kokoshin has suggested that a "military-political science" might have great applicability in this regard as a means of slowing down and structuring the current revolution in conventional military forces to avoid upsetting strategic stability.

In the context of the proclaimed changes in the political side of Soviet/WTO military doctrine, and the diverse programs of

domestic reform and restructuring now under way among WTO members, NATO has an opportunity to transcend the political-ideological elements of conflict which have shaped the Cold War. At the same time the problems associated with threat reduction in the military-technical area will require major progress on a CFE Agreement to eliminate the asymmetrical advantages which the USSR/WTO has in offensive weapons in theater. Unilateral reductions of forces are welcome, cuts in the production of tanks reassuring, but what is required is a political and military transparency which will reduce the risks of surprise attack. Such transparency could set the stage for a demilitarization of the situation in Europe, if it were joined with measures to manage the dynamic changes now underway on both the political and military-technical sides of doctrine.

ENDNOTES

1. Pravda, (May 30, 1987).
2. Pravda (27 July 1987); and D. T. Yazov, Na strazhe mira i sotsializma [On guard for peace and socialism] (Moscow: Voenizdat, 1987), p. 23.
3. Ibid.
4. Peer Lange, "NATO and WTO 'Military Doctrines' in East-West Consultations," in: Robert D. Blackwill and F. Stephen Larrabee, eds., Conventional Arms Control and East-West Security (Durham: Duke University Press, 1989), pp. 186-211.
5. Sovetskaya voyennaya entsiklopediya (Soviet military encyclopedia), III, pp. 225-226.
6. United States, Department of Defense, Joint Chiefs of Staff, Publication 1, (Washington, DC: GPO, 19), p.
7. Lange, "NATO and WTO 'Military Doctrines'," p. 201.
8. G. I. Salmanov, "Sovetskaya voyennaya doktrina i nekotorye vzglyady na kharakter voyny v zashchite sotsializma" (Soviet military doctrine and some views on the nature of war in defense of socialism), Voyennaya mysl' (Military thought), No. 12 (December 1988), p. 4.
9. The challenge of the current East-West consultations on security and doctrine is, according to Lange, "to select the most promising method for moving from the past (mutual deterring threats) and present into the future: precepts for further development of one's own security, which take into account the security imperatives of the other side (so called 'empathetic' approaches)." [Lange, "NATO/WTO 'Military Doctrines'," p. 209].

10. Richard K. Betts, Surprise Attack: Lessons for Defense Planning (Washington, DC: Brookings Institution, 1982); Robert Jervis, Perception and Misperception in International Politics (Princeton: Princeton University Press, 1976); and Klaus Knorr and Patrick Morgan, eds., Strategic Surprise: Incentives and Opportunities (New Brunswick, New Jersey: Transaction, 1983).
11. V. N. Lobov, "K voprosu o vnezapnosti i neozhidannosti" (On the question of surprise and the unexpected). Voyennaya mysl', No. 3 (March 1988), pp. 3-8. See also: Jacob W. Kipp, "General of the Army Vladimir Nikolayevich Lobov: One of Gorbachev's Genshtabisty," The Journal of Soviet Military Studies, II No. 3 (September 1989), pp. 403-416.
12. V. N. Lobov, Voyennaya khitrost' (Military strategem) (Moscow: Voenizdat, 1988), pp. 164-166.
13. Ghulam Dastagir Wardak, comp., Graham Hall Turbiville, Jr., ed., The Voroshilov Lectures: Materials from the Soviet General Staff Academy, Volume I: Issues of Soviet Military Strategy (Washington, DC: National Defense University, 1989), pp. 219-220.
14. Ibid., pp. 322, 331, 333.
15. Adam-Daniel Rotfeld, "CSBMs in Europe: A Future-Oriented Concept" in Blackwill and Larrabee, Conventional Arms Control and East-West Security, pp. 370-372.
16. V. M. Domanevskiy, "Yedinstvo voyennoy doktriny i polevoy ustav" (Unity of military doctrine and field regulations), Russkiy invalid, No. 5 (January 6, 1912), p. 5.
17. Jacob W. Kipp, "Military Doctrine and the Development of Operational Art: The Red Army's Experience, 1918-1936," in: Philip Gillette and Willard Franks, eds., Soviet Military Art in an Era of Change (Forthcoming).
18. Jacob W. Kipp, "Lenin and Clausewitz: The Militarization of Marxism," Military Affairs, XLIX, No. 4 (December 1985), 184-191.
19. V. M. Berezhkov, "Predosterezhenie," SShA, No. 7 (July 1989), pp. 41-43.
20. V. K. Triandafillov, Kharkater operatsii sovremennykh armii (Nature of the operations of modern armies), 3rd Edition (Moscow: Gosvoenizdat., 1936), pp. 222-223.
21. Paul Huth, Extended Deterrence and the Prevention of War (New Haven: Yale University Press, 1988).

22. David Holloway, The Soviet Union and the Arms Race (New Haven: Yale University Press, 1983), pp. 32-35, 56-57.
23. Wardak, The Voroshilov Lectures . . ., pp. 253-254; and V. G. Reznichenko, ed., Taktika [Tactics] (Moscow: Voenizdat, 1984), pp. 13 ff.
24. "Tak my voshli v Afganistan" (Thus we entered Afghanistan), Literaturnaya gazeta, (September 20, 1989), p. 14.
25. Jeffrey Simon, Warsaw Pact Forces: Problems of Command and Control (Boulder, CO: Westview Press, 1985), pp. 192-193. On the operational-maneuver group and its significance from a Western perspective see: C. N. Donnelly, "The Soviet Operational Maneuver Group: A New Challenge for NATO," Military Review, No. 3 (March 1983), pp. 43-60; Philip A. Peterson and John G. Hines, "The Conventional Offensive in Soviet Theater Strategy," Orbis, (Fall 1983), pp. 695-739; and David M. Glantz, Deep Attack: The Soviet Conduct of Operational Maneuver (Fort Leavenworth, KS: Soviet Army Studies Office, 1987).
26. D. Proyektor and A. Utkin, "Evropa i Klausevits." [Europe and Clausewitz] Moskovskiye vedomosti, No. 17 (April 26, 1987); and D. Proyektor, "O politike, Klausevitse i pobede v yadernoy voyne," Mezhdunarodnaya zhizn', No. 4 (April 1988), pp. 79-85.
27. G. M. Sturua, "Bylo li neobkhodimo razvertyvaniye raket SS-20?" [Was the deployment of SS-20 rockets necessary?] SShA, No. 12 (December 1988), pp. 23-29; A. E. Bovin, "Inyye varianty" [Other variants], SShA, No. 12 (December 1988), pp. 29-32; L. S. Semeyko, "SS-20: Oshibka, no men'shaya chem mozno bylo by dumat'" [The SS-20: a mistake, but smaller than one might think], SShA, No. 12 (December 1988), pp. 32-36; S. A. Karaganov, "Eshche neskol'ko soobrazheniy" [Still more considerations], SShA, No. 12 (December 1988), pp. 37-41.
28. The New York Times, (October 23, 1989).
29. A. A. Kokoshin, "Razvitiye voyennogo dela i sokrasheniye vooruzhennykh sil i obychnykh vooruzheniy," Mirovaya ekonomika i mezhdunarodnyye otnosheniya, No. 1 (January 1988), p. 29.
30. Aleksandr Yakovlev, "Dostizheniye kachestvenno novogo sostoyaniya sovetskogo obshchestva i obshchestvennyye nauki," Kommunist, No. 8 (May 1987), p. 18.
31. S. Akhromeyev, "Nasha voyennaya doktrina" (Our military doctrine), Za rubezhom No. 46 (10-16 November 1989), p. 1.
32. Ibid.

33. Ibid., pp. 1 & 3.

34. Salmanov, "Sovetskaya voyennaya doktrina," Voyennaya mysl', No. 12 (December 1988), p. 3.

35. A. A. Kokoshin and V. V. Larionov, "Protivostoyanie sil obshchego naznacheniya v kontekste obespecheniya strategicheskoy stabil'nosti" (Counterpositioning conventional forces in the context of providing strategic stability), Mirovaya ekonomika i mezhdunarodnye otnosheniya, No. 6 (June 1988), pp. 27-28. For a more complete development of this position see: Andrei Kokoshin, Alexander Konovalov, Valentin Larionov and Valeri Mazing, Problems of Ensuring Stability with Radical Cuts in Armed Forces and Conventional Armaments in Europe (Moscow: Novosti, 1989).

36. Paul Dunay, "The Soviet/Warsaw Treaty Concept of Military Doctrine in Light of Recent Soviet Changes," [Unpublished background paper prepared for the Institute for East-West Security Studies, New York: 1989], p. 106.

37. Ibid., p. 112. See also: M. A. Gareev, M. V. Frunze, Military Theorist (Washington, DC: Pergamon-Brassey's International Defense Publishers, 1988), pp. 182-183.

38. I. E. Shavrov and M. A. Galkin, eds., Metodologiya voyenno-nauchnogo poznaniya [The Methodology of Military-Scientific Cognition] (Moscow: Voenizdat, 1977), p. 64.

39. Andrei Kokoshin, "Sopostavlyaya voyennyye doktriny," Pravda (August 21, 1987).

40. Yazov, Na strazhe mira i sotsializma, pp. 32-33.

41. U. S. House of Representatives, Soviet Mobilization and the U. S. Defense Program: Hearings before the Defense Policy Panel of the Committee on Armed Services One Hundredth Congress, Second Session (Washington, DC: Government Printing Office, 1989), pp. 50-52.

42. M. M. Kir'yan, ed., Vnezapnosti v nastupatel'nykh operatsiyakh Velikoy Otechestvenoy voyny Surprise in offensive operations of the Great Patriotic War) (Moscow: Nauka, 1986), p. 199.

43. V. V. Turchenko, "Tendentsii razvitiya teorii i praktiki strategicheskoy oborony" (Trends in the development of theory and practice of strategic defense), Voyennaya mysl', No. 8 (August 1979), pp. 13-21.

44. I. N. Vorob'yev, "Sootnosheniya i vzaimosvyaz' nastupleniya i oborony" (Correlation and interconnection of the offense and defense), Voyennaya mysl', No. 4 (April 1980), p. . See also:

I. N. Vorob'yev, "Podvizhnaya mobil'naya manevrennaya..." (Mobile, maneuver...), Krasnaya zvezda, (27 September 1989).

45. Akademiya General'nogo shtaba: Istoriya Voennoy ordenov Lenina i Suvorova I stepeni akademii General'nogo shtaba Vooruzhennykh Sil SSSR imeni K. E. Voroshilova (Academy of the General Staff: History of the Order of Lenin and Suvorov 1st Degree Military Academy of the General Staff of the Armed Forces of the USSR named for K. E. Voroshilov), 2d edition, (Moscow: Voenizdat, 1987), p. 185.

46. V. V. Turchenko, "O strategicheskoy oborone" (On strategic defense), Voyennaya mysl', No. 7 (July 1982), pp. 16-27.

47. I. G. Zav'yalov, "O roli voennogo potentsiala Vooruzhennykh Sil v nastuplenii i oborone" (On the role of military potential of the Armed Forces in the offense and defense), Voyennaya mysl' No. 3 (March 1983), pp. 13-14.

48. Ibid., p. 9.

49. Ibid., p. 13.

50. Ibid..

51. S. Akhromeyev, "Rol' Sovetskogo Soyuza i yego Vooruzhennykh Sil v dostizhenii korennogo pereloma vo vtoroy mirovoy voyne i yego mezhdunarodnoye znachenie" (The role of the Soviet Union and its Armed Forces in achieving a turning point in World War II and its international significance) Voyenno-istoricheskiy zhurnal, No. 2 (February 1984), pp. 11-26.

52. The New Political Thinking and Soviet Military Doctrine, presentation of the Chief of the General Staff of the Armed Forces of the USSR Marshal of the Soviet Union S. F. Akhromeyev at the Council of Foreign Relations, July 11, 1988.

53. N. V. Ogarkov, Istoriya uchit bditel'nosti (History teaches vigilance) (Moscow: Voenizdat, 1985), p. 69. In an earlier discussion of trends affecting the evolution of military art Marshal Ogarkov discussed the ever increasing role the "air sphere" was playing in modern combat actions, giving to operations a "large, deep character." See: N. V. Ogarkov, Vsegda v gotovnosti k zashchite otechestva (moscow: Voenizdat, 1982), p. 44.

54. I. F. Rachok and V. M. Tolmachev, "Osnovnye tendentsii razvitiya operativnoy oborony" (Primary trends in the development of operational defense), Voyennaya mysl', No. 2 (February 1986), p. 18.

55. Ibid., p. 25.

56. D. T. Yazov, "K voprosu ob ustoychivosti i aktivnosti oborony," Voyennaya mysl', No. 2 (February 1987), pp. 27-28.
57. D. T. Yazov, Na strazhe sotsializma i mira (Moscow: Voenizdat, 1987), pp. 32-33.
58. Salmonov, "Sovetskaya voyennaya doktrina," p. 9.
59. Ibid., p. 10.
60. Ibid.
61. Stanislaw Koziej, "Przedwidywanie kierunku zmian w taktyce wojsk ladowych" (Anticipated directions of changes in ground force tactics), Przeglad Wojsk Ladowych No. 9 (September 1986), p. 9.
62. A. A. Svechin, Strategiya (Strategy), 2d Edition, (Moscow:), pp. 69-70.
63. V. V. Larionov et al., Evolutsiya voyennogo iskusstva: Etapy, tendentsii, printsipy (Evolution of military art: Stages, trends, principles) (Moscow: Voenizdat, 1987), p. 9.
64. Ibid., p. 233.
65. A. Svechin, "Trudy Komissii po issledovaniyu i ispol'zovaniyu opyta voyny 1914-1918 gg" (Works of the Commission for Studying and Using the Experience of the 1914-1918 War), Voenno-istoricheskii sbornik, I, (1919), pp. 3-8.
66. I am indebted to Brigadier General Huba Wass de Czege for sharing with me his thoughts on strategic stability and conventional arms control in Europe.
67. Kokoshin, Konovalov, Larionov, Mazing, Problems of Ensuring Stability with Radical Cuts in Armed Forces and conventional Armaments in Europe, pp. 14-18.
68. B. I. Strel'chenko and E. A. Ivanov, "Nekotoryye voprosy otsenki sootnosheniya sil i sredstv v operatsiyakh," Voyennaya mysl' No. 7 (July 1987), pp. 55-61.
69. Philip A. Peterson and Notra Trulock, III, "Equal Security: Greater Stability at Lower Force Levels," Willaim B. Taylor, Jr., ed., Beyond Burdensharing, Future Alliance Defense Cooperation: Proceedings of a Seminar for Permanent and Military Representatives to NATO Sponsored by the United States Mission to NATO in: The Alliance Papers: Proceedings No. 1 (Brussels: United States Mission to NATO, 1989), pp. 70-81.

70. M. M. Kir'yan, Problemy voyennoy teorii v sovetskikh nauchno-spravochnykh izdaniyakh (Moscow: Voenizdat, 1985), pp. 92-101. For a Western analysis of the Soviet approach to military foresight and forecasting see: Jacob W. Kipp, From Foresight to Forecasting: The Russian and Soviet Military Experience (College Station, TX: Center for Strategic Technology, Texas A & M University, 1988).

71. Vitaly Tsygichko, "Combat Potential Method for the Vienna Talks," Voennyi vestnik/Military Bulletin, No. 5 (March 1989), pp. 7-13.

72. A. P. Vasil'yev and V. K. Rudiuk, "Dostatochna li protivovozdushnaya oborona," Voyennaya mysl' No. 9, (September 1989), pp. 63-64.

73. Krasnaya zvezda, (31 January 1989). See also: Kerry L. Hines, "Soviet Short-Range Ballistic Missiles: Now a Conventional Deep Strike Mission," International Defense Review, No. 12 (December 1985), pp. 1900-1914.

38 A. N. Lapchinsky, Vozdushnaya armiya [The Air Army] (Moscow: Gosvoenizdat, 1939), p. 144. See also: Jacob W. Kipp, "Soviet 'Tactical' Aviation in the Postwar Period," Airpower Journal, II, No. 1 (Spring 1988), pp. 8-27.